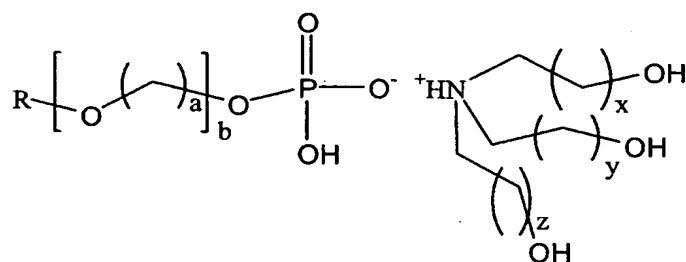


ABSTRACT OF THE DISCLOSURE

Cleaning solutions for photoresist are disclosed which are useful for cleaning a semiconductor substrate in the last step of development when photoresist patterns are formed. Also, methods for forming photoresist patterns using the same are disclosed. The disclosed cleaning solution comprises H₂O as a solution, a surfactant which is phosphate-alcoholamine salt represented by Formula 1, and an alcohol compound. The disclosed cleaning solution has lower surface tension than that of distilled water which has been used for conventional cleaning solutions, thereby improving resistance to photoresist pattern collapse and stabilizing the photoresist pattern formation.

Formula 1



wherein R, x, y, z, a and b are as defined in the specification.